

NEW SPECIES OF *LASIANTHAEA*, *VERBESINA* AND
WEDELIA (ASTERACEAE) FROM SIERRA
SUROTATO, NORTHERN SINALOA

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ABSTRACT

Three new species are described, one each in the genera *Lasianthaea*, *Verbesina* and *Wedelia*. In addition, a clarification of a previously published species is included.

KEY WORDS: Asteraceae, México, systematics.

Recent collections of unidentified material at the University of Arizona (ARIZ) made by H.S. Gentry in the Sierra Surotatos of northern Sinaloa have revealed the following novelties.

Lasianthaea gentryi B. Turner, sp. nov. Figure 1. TYPE: MÉXICO. Sinaloa: Sierra Surotato, Quebrado de Mansana, pine-oak forests, 4000-5000 ft, steep moist canyon slopes, northern exposures, 10-14 Sep 1941, H.S. Gentry 6464 (holotype: ARIZ!).

Lasianthaea fruticosae (L.) K. Becker similis sed foliis majoribus tenuibus et pedunculis valde pubescentibus trichomatibus fulvis patentibus multiseptatis 1.5-2.0 mm longis differt.

Shrubs 2-3 m high with slender spreading branches. Stems sparsely hispidulous. Leaves opposite, 10-20 cm long, 3-6 cm wide; petioles 6-15 mm long; blades thin, ovate, gradually tapering upon the petioles, with 3-5 principal nerves which arise 1-3 cm above the base, sparsely to moderately hispid above and below, those of the upper surface broad based, the margins serrulate. Heads 5-15 in fasciculate terminal clusters, these over-topped by the adjacent leaves, the peduncles 1-2 cm long, markedly pubescent with tawny multiseptate spreading trichomes, 1.5-2.0 mm long. Involucres campanulate, 6-8 mm high, 5-6 mm wide, the bracts subequal, lanceolate (outermost) to broadly ovate, hispidulous on the faces and marginally ciliate. Ray florets 8-11, pistillate, fertile, the ligules yellow, 6-8 mm long. Disk florets 20-30, the corollas yellow, 5-6 mm long, glabrous except for the sparsely hispidulous lobes. Achenes (those of the disk) ca 3 mm long, 1.5 mm wide, narrowly

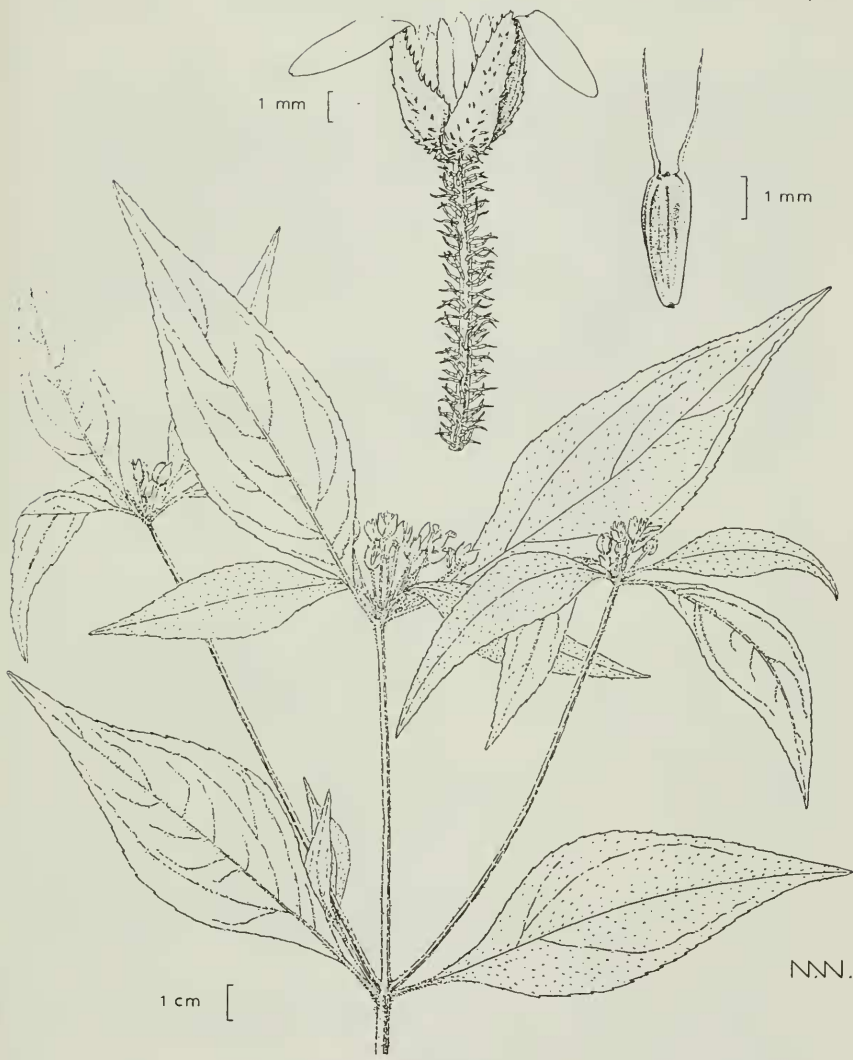


Fig. 1 *Lasianthaea gentryi*, from holotype

winged on the abaxial surface, the pappus of 1 or 2 slender awns 3-4 mm long.

A very distinct taxon, closely related to *Lasianthaea fruticosa* (L.) K. Becker but easily distinguished by its remarkable tawny-hirsute pubescence, unlike that found in any of the several varieties within that species, as recognized by Becker (1979). Figure 2 shows the distribution of the varieties of *L. fruticosa*, sensu Becker; the location of *L. gentryi* is shown by an asterisk. It might have been equally reasonable to treat the latter as but a localized variety of *L. fruticosa*, but it is strikingly different from all of the presently known varieties. While probably closest to the var. *fasciculata* (DC.) K. Becker, the latter shows no signs of intergradation with it.

Verbesina sinaloensis B. Turner, sp. nov. TYPE: MÉXICO. Sinaloa: "Sierra Monterey, shady canyon bottom with oaks, pines, palms and running water," 5000 ft, 10 Mar 1940, *H.S. Gentry 5875* (holotype: ARIZ!; isotype: GH!).

Differt a *Verbesina grayi* (Seem.) Hemsl. foliis angustioribus lineari-lanceolatis petiolis brevioribus, corollis radii longioribus, et flosculis disci numerosioribus.

Shrubs 1-2 m high. Stems purplish, minutely puberulent. Leaves opposite or ternate below, alternate near the capitulescence, 6-15 cm long, 0.8-1.5 cm wide; petioles 1-5 mm long; blades linear-lanceolate, pinnately nervate, roughly hispidulous-pilose above, appressed silky-sericeous beneath, the margins rather evenly serrulate. Heads 3-5 in terminal or subterminal clusters, the ultimate peduncles 2.5-4.0 cm long. Involucre campanulate, 7-9 mm high, 4-5 seriate, the bracts pale yellow and markedly gradate, scarious with narrowly acute apices, these grading into remarkably similar receptacular bracts. Ray florets 11-13, pistillate, fertile, the tube ca 3 mm long, pubescent the ligules yellow, 10-12 mm long, ca 3 mm wide. Disk florets 50 or more, the corollas yellow, ca 5.5 mm long, the tube ca 1.5 mm long, pubescent. Ray achenes ca 3 mm long, plump, clavate, black, glabrous, wingless, epappose. Disk achenes (immature) radially flattened, pubescent, the pappus of 2 slender deciduous awns ca 2 mm long.

Additional collections examined: MÉXICO. Sinaloa: Sierra Surotato, Los Pucheros, "Pine-oak madroño; moist soil in rocks, canyon," 5500-6500 ft, 17-24 Mar 1945, *H.S. Gentry 7193* (GH,US).

Verbesina sinaloensis is closely related to *V. grayi* (Seem.) Hemsl. of northern Durango and Nayarit southwards, which would include both *V. discoidea* (Brandege) Rzed. and *V. heterocarpa* Blake by my reckoning. Rzedowski (1980) treated the latter two species as synonymous, but failed to recognize their relationship to *V. grayi*. McVaugh (1984), however, recognized *V. heterocarpa* without reference to Rzedowski's publication, nor does he mention *V. grayi*. The present species differs from *V. grayi* in its mostly

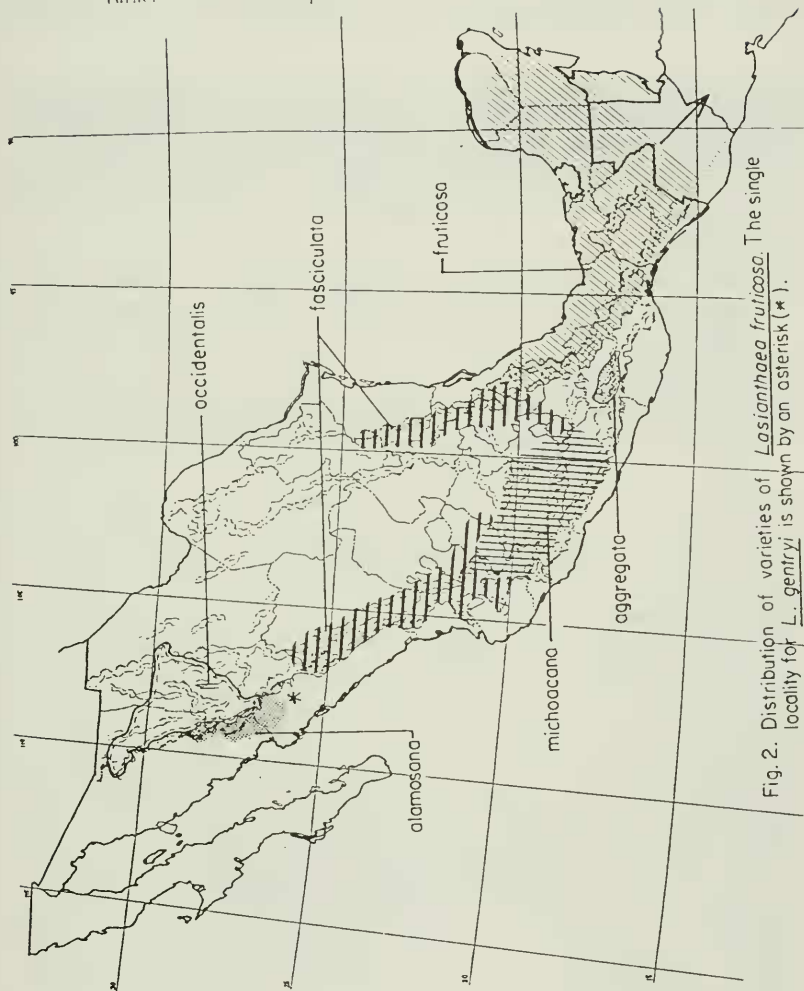


Fig. 2. Distribution of varieties of *Lasiantha fruticosa*. The single locality for *L. gentryi* is shown by an asterisk (*).

straw colored, scarious, 4-5 seriate, strongly gradate involucre bracts, more numerous disk florets (50+), longer, well developed, rays (11-15 mm long vs 1-8 mm long or absent) and more narrowly lanceolate to lanceolate-elliptic leaves which are softly appressed-pilose beneath.

According to H.S. Gentry (pers. comm.), Sierra Monterey is part of the Sierra Surotatos.

Wedelia gentryi B. Turner, sp. nov. TYPE: MÉXICO. Sinaloa: Sierra Surotato, Ocurahui, "rolling open valley with argillaceous soils," 6000-7000 ft, 1-10 Sep 1941, H.S. Gentry 6289 (holotype: ARIZ!; isotypes: ARIZ!, TEX!).

Wedelia chihuahuanae B. Turner similis sed foliis majoribus lanceolati-ovatis et capitulis 2-5 aggregatis in pedunculis ultimis plerumque 1-3 cm longis differt.

Suffruticose perennial herbs, said to be a "decumbent ... bush, dense about base." Stems tan, terete, harshly hispidulous. Leaves opposite throughout, 6-12 cm long, 1-2 cm wide; petioles 0.5-1.0 cm long; blades lanceolate, tapering upon the petioles, trinervate from above the base, sparsely appressed hispid on both surfaces, especially along the veins beneath, uncinuate hairs absent, the margins remotely serratulate. Heads terminal or subterminal in clusters of 2 to 5, the ultimate peduncles 0-3 cm long (the earliest head, if single, rarely on peduncles to 8 cm long). Involucres 9-10 mm high, the bracts 2-3 seriate, subequal, the outermost ovate-lanceolate with acute green apices, the innermost elliptic-ovate, somewhat scarious with ciliate margins. Receptacular bracts purple keeled, shorter than the subtended florets. Ray florets ca 8, neuter, sterile, the tubes ca 3 mm long, the ligules 7-9 mm long. Disk florets 15-25, the corollas yellow, ca 6 mm long. Achenes (immature) ca 2 mm long, pubescent, the pappus a crown of erose scales ca 0.5 mm high.

The species is presumably closely related to the recently described *Wedelia chihuahuana* B. Turner (1988; cf comments below) having the decumbent habit, round stems and vestiture of that taxon, but differing in its longer, narrower, lanceolate-ovate leaves and heads in clusters of 2-5 on much shorter peduncles (mostly 1-3 cm long vs 3-8 cm).

Wedelia chihuahuana B. Turner, Phytologia 65:349. 1988.

Emended description: *Wedelia hispida* H.B.K. similis sed caulibus laxis ut videtur procumbentibus et capitulis 1-3 in pedunculis 2-8 cm longis differt.

In my recent description of this species (Turner 1988), I erred in making formal comparison to an unpublished (and unnecessary) combination *Wedelia texana* (A. Gray) B. Turner. At the time of my original description, I intended to make the latter combination, but subsequently concluded that this was

synonymous with *W. hispida*. Unfortunately, I forgot to substitute the name *W. hispida* H.B.K. for *W. texana* (A. Gray) B. Turner in my diagnosis. So as to avoid any confusion, I republish *W. chihuahuana* with reference in my diagnosis to a previously and validly published name.

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